

OC-5291

M14929

JUN 22 1955

Honorable Arthur S. Flemming  
Director, Office of Defense Mobilization  
Executive Office of the President  
Washington 25, D. C.

Dear Dr. Flemming:

In your letter of 1 June 1955, to the Director Central Intelligence Agency, concerning the steps which might be taken to minimize the vulnerability of our trans-Pacific telecommunications service, you requested comments on an inclosed staff study on the subject.

With regard to recommendation (a), to purchase and activate the existing cable in the Pacific, this Agency questions the validity of the estimated cost thereof and also doubts that the cable would be worth the cost of rehabilitation. (Careful consideration was given to a similar proposal by the Joint Communications-Electronics Committee during the time I was its Chairman, 1949-1951. The conclusion was that rehabilitation would not be worth the cost.) Prior to any further action, the availability of a "cable ship" should be determined, together with an estimate of the continued maintenance costs of this cable, which is old and which has been out of operation for years.

With regard to recommendations (b), that the Department of Defense include in its planning forward scatter radio systems beyond Hawaii, and (c), that exploration be undertaken to ascertain the basis under which a modern cable could be provided from San Francisco to Hawaii, are concurred in by the Central Intelligence Agency.

Sincerely,

H. M. McClelland  
Director of Communications

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Chrono: HMM/mo

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## 17. TRANS-PACIFIC CABLE PROJECTS / M1431

All Trans-Pacific communications are by radio except for a single British cable from Vancouver, British Columbia to Australia. A Pacific Ocean cable owned by the Commercial Pacific Cable Company was abandoned at the outbreak of World War II, and a recent review of the situation indicates that this cable is electrically intact between San Francisco, Honolulu, Midway and Guam. The sections between Guam and Manila and Guam and Tokyo are not in usable condition. All terminal equipment has been removed. Negotiations have been underway since September 1954 looking towards the possible purchase of the cable for use only as a standby facility in case of emergency. Transmission speeds would be slow and it would not be economical to operate on a day-to-day basis. The company's original offer to sell the cable for \$1,008,000 is a matter of continuing review. A reasonable figure for purchasing the cable and equipping it is considered to be about \$250,000. About one year would be required to obtain the necessary terminal equipment and rehabilitate the cable for use. Forward scatter radio systems could be used beyond Guam to minimize the possibility of jamming.

The Government franchise authorizing the cable provides that the Federal Government may seize and use the cable at any time in connection with a national emergency, and precludes removal without permission.

The possibility of a modern-design telephone-telegraph cable across the Pacific comparable to the new Trans-Atlantic telephone cable now under construction has been considered. Such a cable is technically feasible with present day techniques. Manufacturing capabilities would be available which

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would permit a Trans-Pacific cable to be laid as far as Honolulu by the Fall of 1957 and to the Orient by late 1958 or early 1959 if the Atlantic Cable is completed by the summer of 1956. The cost of the San Francisco-Honolulu portion would probably be of the order of \$40 million with an additional \$80 million for the section beyond Honolulu. A preliminary review indicates that the portion from San Francisco to Honolulu could probably be undertaken by private industry if there were indicated demand for use of the circuits for defense purposes upon completion. On a normal peacetime basis, such a cable would probably not be planned before 1960, and the section beyond Honolulu could probably not be justified as a commercial undertaking in the foreseeable future, which is beyond the most critical period from the standpoint of potential jamming.

**RECOMMENDATION**

In order to minimize our vulnerability from jamming in the period 1955-60, it is recommended that

- (a) Negotiations be concluded with the Commercial Pacific Cable Company to purchase and activate the existing cable for use as an emergency measure for a reasonable sum (probably of the order of \$250,000) (ODM/DoD)
- (b) The Department of Defense immediately include in its planning forward scatter systems beyond Honolulu to reach strategic military locations in the Far East. (DoD)
- (c) Exploration be undertaken with the commercial companies in order to ascertain the bases under which a modern repeater

telephone-telegraph cable could be provided between  
San Francisco and Honolulu at the earliest practicable  
date. (FCC/ODM/DoD)

Upon completion of the present Trans-Atlantic program in late  
1955-56 and the carrying out of the above recommendations in the Pacific  
during 1956-57, it should afford us a relatively secure system from the  
standpoint of jamming and would provide a fairly positive means of  
communication.